Work Order ID 70929

Friday, June 17, 2011 2:25:02 PM

Item ID: D3196-1
Revision ID:
Item Name: Bar
Start Date: 6/17/2011 **Start Qty:** 4.00
Required Date: 6/30/2011 **Req'd Qty:** 4.00
Reference:

Accept **Setup Start** **Stop**

Cust Item ID:
Customer:

Approvals: **Process Plan:** // **Date:** 11-06-17 **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**									
D3196 / Rev C									
100	BAND SAW	0.00				2	ϕ		
Bandsaw	**Memo**	0.00	BA 11/06/23						
Jeaspa Bandsaw	Cut blank: (0.75" x 1.50") x 26.200" long Bar								
110	HAAS CNC VERTICAL MACHINING #1	0.00				2	ϕ		
HAAS 1	**Memo**	0.00	~~BA~~ BA 11/06/27						
HAAS CNC vertical machine #1	1-Machine D3196-1 as per Folio FA339 and Dwg D3196Identify as D3196-1□2-Deburr								
120	QC2- Inspect parts off machine FAI/FAIB	0.00	BA 11/06/27			2	ϕ		
QC	**Memo**	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 70929

Friday, June 17, 2011 2:25:02 PM

Item ID: D3196-1 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Bar

Start Date: 6/17/2011 **Start Qty:** 4.00 **Cust Item ID:**

Required Date: 6/30/2011 **Req'd Qty:** 4.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
QC	**Memo**	0.00	mk 11/06/27			2	0		
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	**Memo**	0.00							
Hand Finishing									
150	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
Powdercoat	**Memo**	0.00							
Powder Coating	START TIME: 8:30 ☐OVEN TEMPERATURE: 3200 ☐FINISH TIME: 9:00								

2x Ø m-L 11/06/27

2x Ø m-L 11/06/28

M115128

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

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NOTE: Date & initial all entries

Work Order ID 70929

Friday, June 17, 2011 2:25:02 PM

Item ID: D3196-1 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Bar

Start Date: 6/17/2011 **Start Qty:** 4.00 **Cust Item ID:**

Required Date: 6/30/2011 **Req'd Qty:** 4.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00				2	ϕ	BR	11-6-28.
QC	**Memo**	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: ST260	0.00							
Packaging	**Memo**	0.00				CL	11/06/28	(x2)	
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
QC	**Memo**	0.00							
Quality Control									

11-06-28

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

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			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

Friday, June 17, 2011 2:25:10 PM

Work Order ID: 70929

Parent Item: D3196-1

Parent Item Name: Bar

Start Date: 6/17/2011 **Required Date:** 6/30/2011

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP Rev: A New Issue 05-11-08 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.750X01.500		Purchased	No			100	f	21.1912	2.183	9.191579			

6061-T6 Bar .750 X 1.50

Location	Loc Qty	Loc Code
MAT003	21.1912	
116405	0.4492	
116604	1.5	
✓116623	19.242	

2.1916 ft

B.A 11/04/23

✓100742 (0.750 X 2.000)

2.1916 ft.

(please pull out of computer)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	10929
Description: Bar	Part Number:	D3196-1
Inspection Dwg: D3196 **Rev:** C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
26.094	+/-0.010	26.094	✓		Tape	GA-12
4.045	+/-0.010	4.048	✓		Vern	GA-01
18.003	+/-0.005	18.003	✓		Tape	GA-12
0.750	+/-0.005	0.751	✓		Vern	GA-01
1.500	+/-0.010	1.503	✓		"	"
Ø0.344	+0.006/-0.001	Ø 0.344	✓		"	"
Ø0.660 x 100°	+0.008/-0.001 x 0.5°	Ø0.658 X 100°	✓		"	"
0.060 x 45°	+/-0.010 x 0.5°	0.058 X 45°	✓		"	"
0.750	+/-0.010	0.752	✓		"	"
0.250	+/-0.010	0.250	✓		"	"
3.495	+/-0.010	3.495	✓		VERN	GA-01
9.000	+/-0.010	9.000	✓		Vern	CNC-02
16.844	+/-0.010	16.844	✓		Tape	GA-12
21.498	+/-0.010	21.498	✓		"	"
R0.125	+/-0.010	R0.125	✓		R-G	ref.
1.100	+/-0.010	1.091	✓		Vern	GA-01
R0.125	+/-0.010	R0.125	✓		R-G	ref.
0.444	+/-0.010	0.443	✓		Vern	GA-01

Measured by:	B.A
Date:	11/06/27

Audited by:	
Date:	11/06/27

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue	KJ/RF	
B	06.10.24	Dwg Rev. updated	KJ/JLM	
C	07.03.21	Dimensions updated per Dwg rev. C	KJ/JLM	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

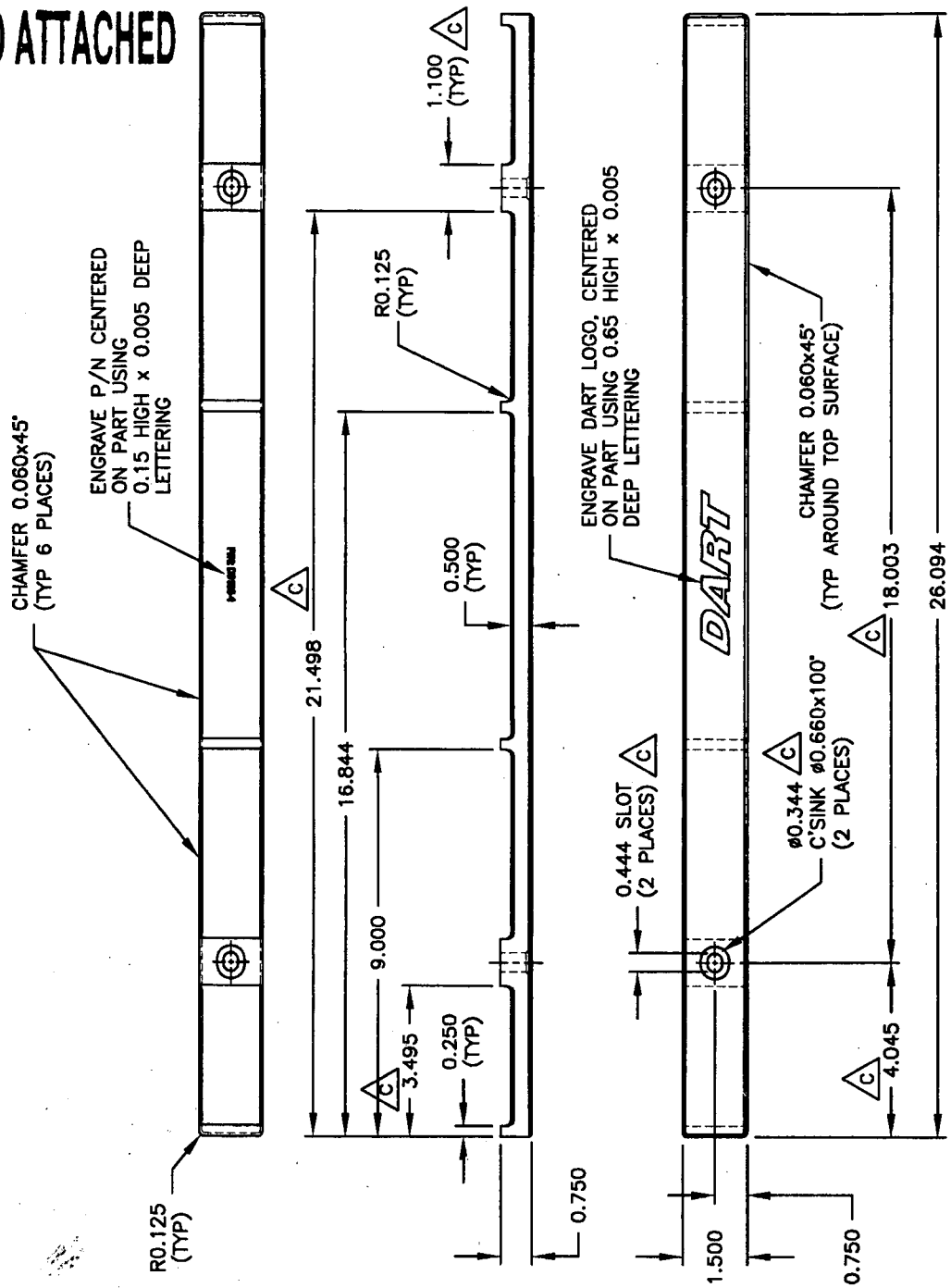
NOTE: Date & initial all entries

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED	DRAWING NO. D3196	REV. C SHEET 1 OF 3
DATE 06.10.31		TITLE BAR	SCALE 1:4

A	03.06.25	NEW ISSUE
B	06.09.25	ADD D3196-5
C	06.10.31	ADD SLOTS ON -1; REMOVED -5

RELEASED
06.10.31

DEO ATTACHED



SHOP COPY
RETURN TO ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO. 70929 11/06/17

D3196-1 BAR

1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8) (REF DART SPEC. M6061T6B)
2) BREAK ALL SHARP EDGES 0.005 TO 0.010
3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1 POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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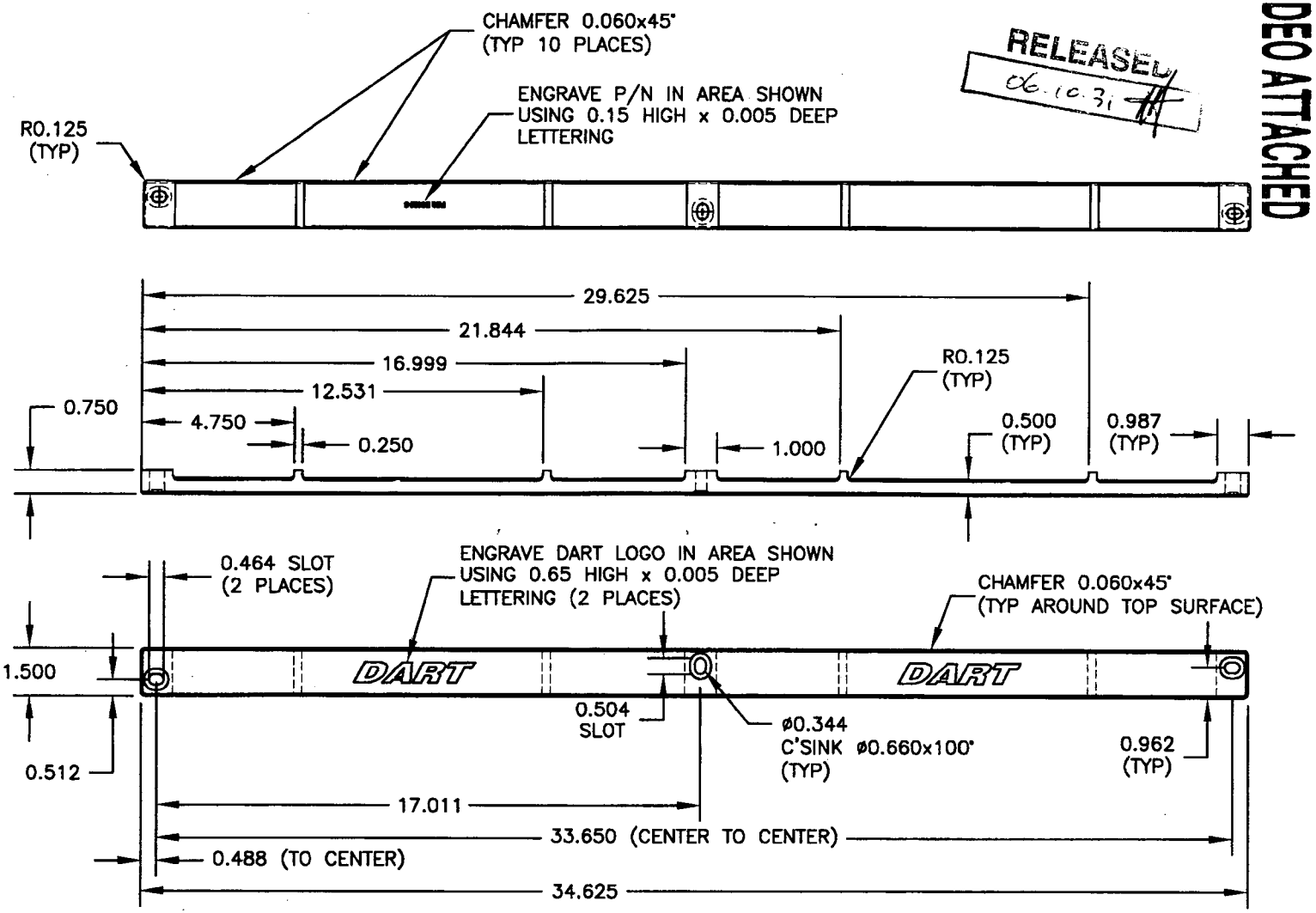
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DEO ATTACHED

RELEASED 06.10.31



D3196-3 BAR

1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
   (REF DART SPEC. M6061T6B)
2) BREAK ALL SHARP EDGES 0.005 TO 0.010
3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
   POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

w/o 10929

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3196	REV. C
DATE 06.10.31		TITLE BAR	SHEET 2 OF 3 SCALE 1:5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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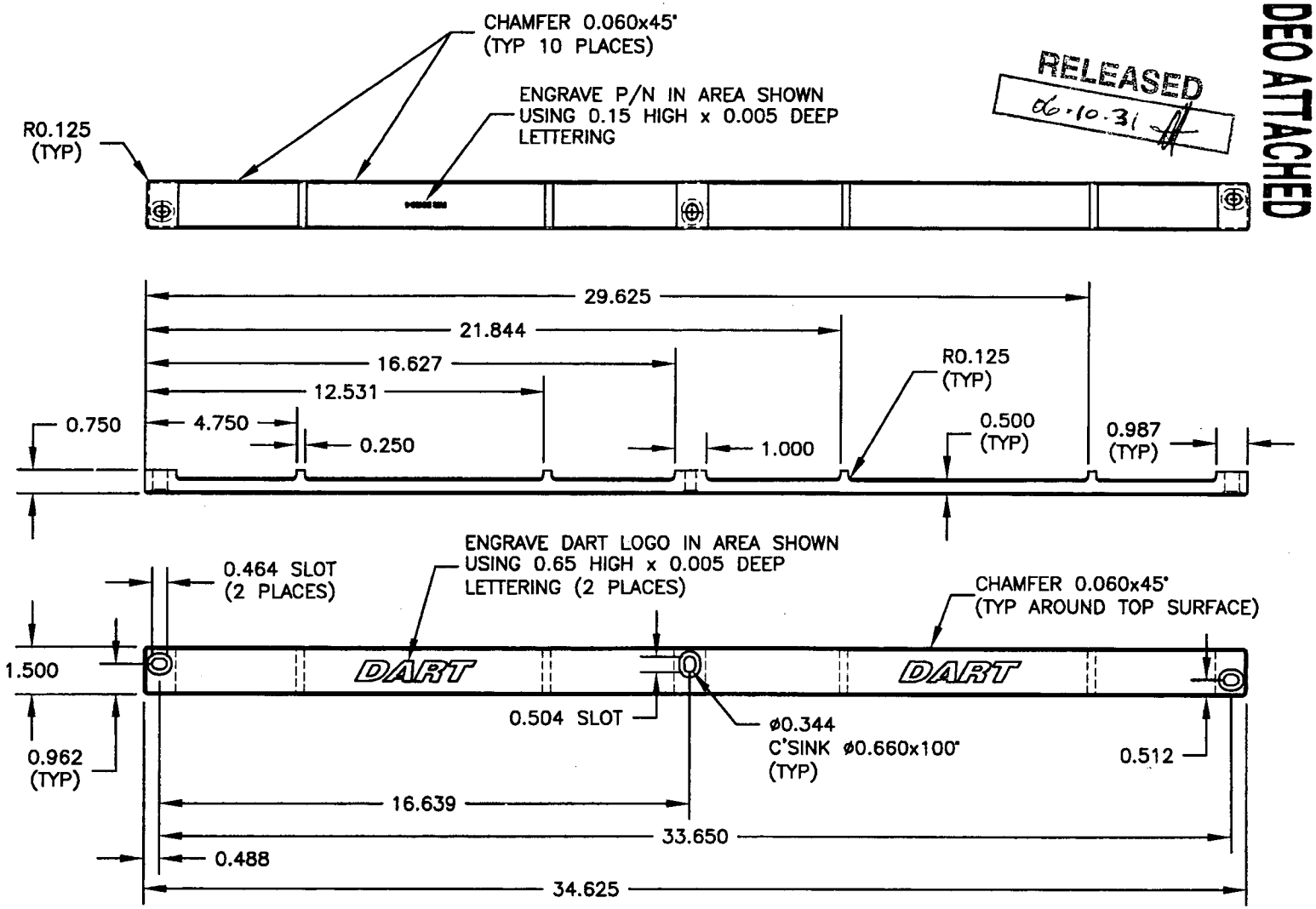
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DEO ATTACHED

RELEASED
06.10.31



D3196-4 BAR

w/o 10929

1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
   (REF DART SPEC. M6061T6B)
2) BREAK ALL SHARP EDGES 0.005 TO 0.010
3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
   POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE 06.10.31	TITLE BAR	DRAWING NO. D3196 REV. C
		SHEET 3 OF 3 SCALE 1:5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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NOTE: Date & initial all entries

DRAWING NO.	TITLE	REV.	DART AEROSPACE LTD	D.E.O. NO.	SHEET NO.	SCALE
D3196	BAR	C	ENGINEERING ORDER	D3196-C-1	SHEET 1 OF 2	NTS

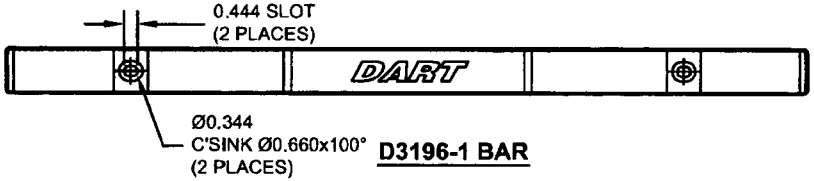
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.
AJS				
DATE 08.08.27	DATE 08.08.28	DATE 08.08.29	DATE 08.08.29	DATE 08.09.04

SHEET 1 MODIFY SLOT DIMENSIONING ON D3196-1 AS SHOWN:

IS:

D3196-1 BAR

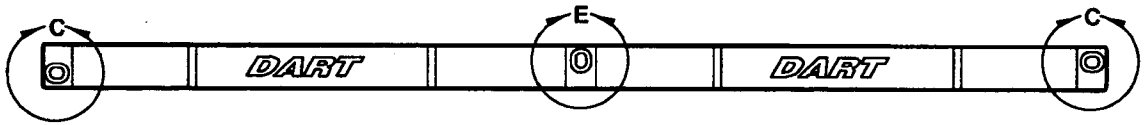
WAS:



D3196-1 BAR

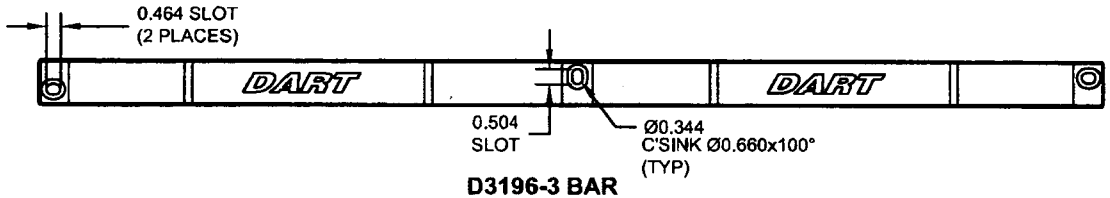
SHEET 2 MODIFY SLOT DIMENSIONING ON D3196-3 AS SHOWN:

IS:



D3196-3 BAR

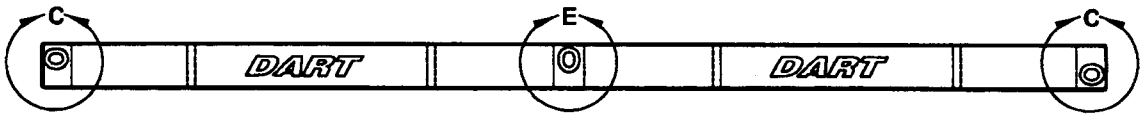
WAS:



D3196-3 BAR

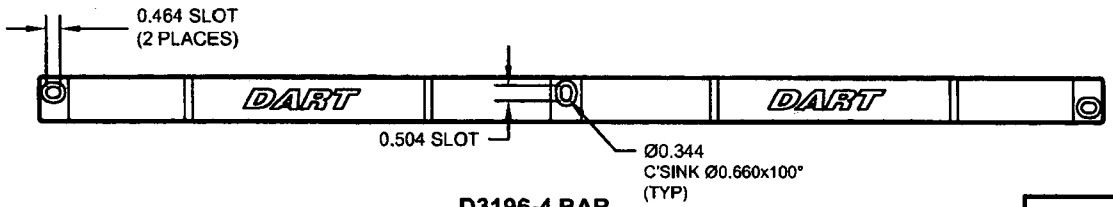
SHEET 3 MODIFY SLOT DIMENSIONING ON D3196-4 AS SHOWN:

IS:



D3196-4 BAR

WAS:



D3196-4 BAR

wo 10929

Dart Aerospace Ltd

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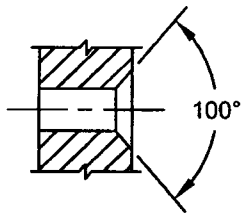
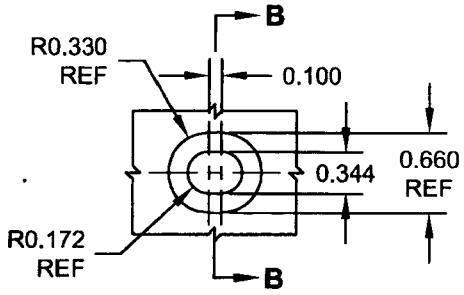
DRAWING NO.	TITLE	REV.	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO.	SHEET NO.	SCALE
D3196	BAR	C		D3196-C-1	SHEET 2 OF 2	NTS

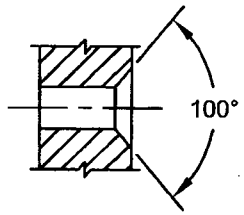
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.
AJS				
DATE 08.08.27	DATE 08.08.28	DATE 08.08.29	DATE 08.08.29	DATE 08.09.04



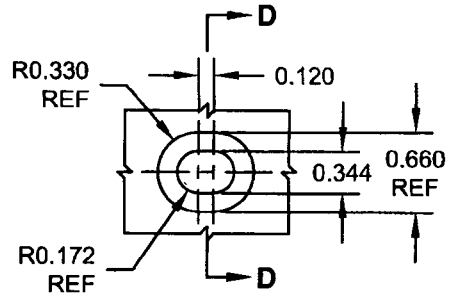
SECTION B-B



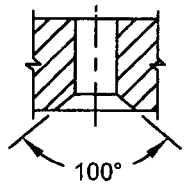
DETAIL A



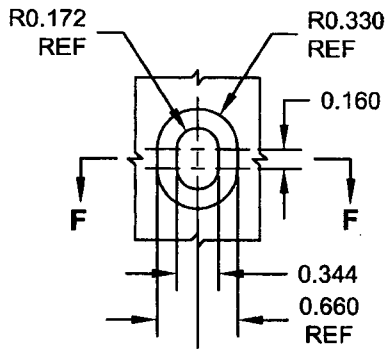
SECTION D-D



DETAIL C



SECTION F-F



DETAIL E

w/o 70929

NOTE: THIS CHANGE HAS BEEN DONE TO CLARIFY SLOT DIMENSIONS ONLY. NO CHANGES HAVE BEEN MADE TO THE PARTS
SEE NCR 08-051 FOR FURTHER INFORMATION
ALL OTHER INFORMATION REMAINS UNCHANGED

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

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